

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A cutting device comprising:

a strip shaped metallic thin blade;

a power supply that passes an electric current through the thin blade to cause the thin blade to heat; and

a drive part that causes the thin blade to move in a thickness direction of a member to be cut.

2. (Original) The cutting device of claim 1, further comprising

a non-contact thermometer that measures the temperature of the thin blade without contacting the thin blade, and

a controller that controls the electric current passing through the thin blade on the basis of a temperature detection signal from the non-contact thermometer.

3. (previously presented) The cutting device of claim 1, wherein the surface of the thin blade is coated with a low-friction material whose frictional resistance is less than that of the metal configuring the thin blade.

4. (previously presented) The cutting device of claim 1, further comprising a tension applying part that applies tension to the thin blade.

5. (previously presented) The cutting device of claim 1, further comprising a cutting condition changing part that enables a cutting angle and a diagonal angle to be changed wherein, the cutting angle is an angle formed between a line indicating the moving direction of the thin blade and a line orthogonal to the thickness direction of the member to be cut; and the diagonal angle is an inclination angle of the thin blade with respect to a direction orthogonal to a longitudinal direction of the member to be cut.

6. (previously presented) The cutting device of claim 1, wherein the thin blade is longer than the width of the member to be cut.

7. (withdrawn) A method of cutting a member to be cut with a metallic strip shaped thin blade that has been heated, the method comprising:

passing an electric current through a thin blade that is longer than the width of the member to be cut to cause the thin blade to heat; and

moving the thin blade when cutting the member with a blade edge longitudinal direction that is slanted θ_b degrees with respect to a width direction orthogonal to a longitudinal direction of the member, and with the thin blade slanted at θ_a degrees with respect to a direction orthogonal to a thickness direction of the member.

8. (new) The cutting device of claim 4, wherein the tension applying part comprises a plurality of links swingably supported between at least two support frames.

9. (new) The cutting device of claim 3, wherein the low-friction material is fluororesin.

10. (new) A cutting device comprising:

a strip shaped metallic thin blade;

means for passing an electric current through the thin blade to cause the thin blade to heat; and

a drive part that causes the thin blade to move in a thickness direction of a member to be cut.